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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/698,978 | 10/31/2003 | Rainer Ruggaber | 13909-110001 / 2002P10197 | 8840 |
| 32864 7590 01/26/2007 FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | EXAMINER BAROT, BHARAT | |
| | | | ART UNIT 2155 | PAPER NUMBER |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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| 3 MONTHS | 01/26/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/698,978

Applicant(s)

RUGGABER ET AL.

Examiner

Bharat N. Barot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/8, 3/19, 5/7, 6/11, 8/9, 10/5 2004
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103(a)

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-2, 4-9, and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kontothanassis (U.S. Patent No. 7,149,807) in view of Chow et al (U.S. Patent No. 7,010,002).

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4. As to claim 1, Kontothanassis discloses a publish-subscribe system (figure 1; and column 2 lines 40-64) comprising: a producer configured to publish a message and to subscribe to an acknowledgement that the message was received; and a consumer configured to subscribe to the message and to publish the acknowledgement (column 9 lines 16-59);

However, Kontothanassis does not explicitly disclose a network configured to register a message subscription and an acknowledgement subscription, to process the message subscription and the acknowledgement subscription, to forward the message to the consumer based on the message subscription and to forward the acknowledgement to the producer based on the acknowledgement subscription.

Chow et al explicitly disclose a network configured to register a message subscription and an acknowledgement subscription, to process the message subscription and the acknowledgement subscription, to forward the message to the consumer based on the message subscription and to forward the acknowledgement to the producer based on the acknowledgement subscription (column 27 line 18 to column 28 line 18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Chow et al stated above in the publish-subscribe system of Kontothanassis because it would have improved managing and controlling a publish-subscribe system and increased the flexibility, reliability, and performance scalability of the network and publish-subscribe system.

5. As to claims 2 and 4-5, Kontothanassis discloses that the producer includes a reliability mechanism to subscribe to the acknowledgement associated with a published message and the consumer includes a reliability mechanism to publish the acknowledgement (column 9 lines 29-59); and also discloses that the reliability mechanism removes duplicate messages (column 9 lines 51-56).

6. As to claim 6, Chow et al disclose that the network includes a content-based messaging (CBM) router to route the message and the acknowledgement (figure 2; column 27 lines 40-56; and column 28 lines 1-18).

7. As to claims 7-8, Chow et al disclose that the reliability mechanism that uses a generic addressing scheme in identifying client devices; and the generic addressing scheme provides a unique identity to the consumer and the producer (column 27 lines 24-35; and column 28 lines 14-18).

8. As to claim 9, Kontothanassis discloses a reliability application program interface (API) for reliable content-based messaging comprising instructions to cause a processor to: receive a message from a producer application; forward the message to an interface to publish the message to a content-based message (CBM) network; and receive the acknowledgement from the interface (figure 1; column 2 lines 40-64; and column 9 lines 16-59).

However, Kontothanassis does not explicitly teach the steps of: register a subscription for an acknowledgement to the message; and modify the message by adding at least one field to the message.

Chow et al explicitly teach the steps of: register a subscription for an acknowledgement to the message; and modify the message by adding at least one field to the message (column 26 line 35 to column 27 line 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Chow et al stated above in the publish-subscribe system of Kontothanassis because it would have improved managing and controlling a publish-subscribe system and increased the flexibility, reliability, and performance scalability of the network and publish-subscribe system.

9. As to claims 11-13, Chow et al disclose that the at least one field includes an identification field, a message type field, a recipient field that identifies one or more receivers of the message, and a sender field that identifies a sender of the message (column 26 line 35 to column 28 line 18).

10. As to claim 14, Kontothanassis discloses a reliability application program interface (API) for reliable content-based messaging comprising instructions to cause a processor to: receive a message from an interface; publish an acknowledgement to the message; and forward the message to a consumer application (figure 1; column 2 lines 40-64; and column 9 lines 16-59).

However, Kontothanassis does not explicitly teach a step of: modify the message by removing at least one field from the message.

Chow et al explicitly teach a step of: modify the message by removing at least one field from the message (column 26 line 35 to column 27 line 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Chow et al stated above in the publish-subscribe system of Kontothanassis because it would have improved managing and controlling a publish-subscribe system and increased the flexibility, reliability, and performance scalability of the network and publish-subscribe system.

11. As to claim 15, Kontothanassis discloses that API includes instructions to cause a processor to determine if the message has been previously received and to filter out the message if the message has previously been sent (column 9 lines 51-59).

12. As to claims 16-18, they are also rejected for the same reasons set forth to rejecting claims 11-13 above, since claims 16-18 do not teach or define any new limitations above claims 11-13.

13. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kontothanassis (U.S. Patent No. 7,149,807) in view of Chow et al (U.S. Patent No. 7,010,002) as applied to claims 1 and 9 above, and further in view of Nieratschker (U.S. Patent No. 6,405,236).

14. As to claim 3, neither Kontothanassis nor Chow et al explicitly discloses that the producer includes a timer and the producer republishes the message if a period of time expires before receiving the acknowledgement.

Nieratschker explicitly discloses that the producer includes a timer and the producer republishes the message if a period of time expires before receiving the acknowledgement (see abstract; figures 3-4 and 6; and column 5 line 46 to column 6 line 36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Nieratschker stated above in the publish-subscribe system of Kontothanassis because it would have improved managing and controlling a publish-subscribe system and increased the flexibility, reliability, and performance scalability of the network and publish-subscribe system.

15. As to claim 10, they are also rejected for the same reasons set forth to rejecting claim 3 above, since claim 10 does not teach or define any new limitations above claim 3.

Additional References

16. The examiner as of general interest cites the following references.

- a. Dorner et al, U.S. Patent No. 7,146,616.
- b. Giotta et al, U.S. Patent No. 6,877,107.

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Contact Information

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bharat Barot** whose Telephone Number is **(571) 272-3979**. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number **(571) 273-8300**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Saleh Najjar**, can be reached at **(571) 272-4006**.



**BHARAT BAROT
PRIMARY EXAMINER**

Patent Examiner Bharat Barot

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January 12, 2007